



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,554	12/31/2003	Muraleedhara Herur Navada	10559-906001 / P17954	5716

20985 7590 03/27/2008
FISH & RICHARDSON, PC
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER

NGUYEN, VAN KIM T

ART UNIT	PAPER NUMBER
2152	

MAIL DATE	DELIVERY MODE
03/27/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. This Office Action is responsive to communications filed on January 2, 2008. Claims 1-26 are pending in the case.

Response to Arguments

2. Applicant's arguments, see page 7, with respect to the rejection of claims 15-17 under 35 U.S.C. §112 have been fully considered and are persuasive. The rejection of claims 15-17 under 35 U.S.C. §112 has been withdrawn.

3. Applicant's arguments and amendment, see page 8, with respect to the rejection of claims 8-14 under 35 U.S.C. §101 have been fully considered and are persuasive. The rejection of claims 8-14 under 35 U.S.C. §101 has been withdrawn.

4. Applicants' command regarding filing a terminal disclaimer is noted; however, the double patenting rejection is remained.

5. Applicant's arguments regarding the rejection of claims 1-26 have been fully considered but they are not persuasive. However, as the previous Office action contains a clerical error in, i.e., claims 1-4, 7-11, 14-17 and 18-26 should have been rejected under 35 U.S.C. §103(a) instead of 35 U.S.C. §102(b), this Office action is non final.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Art Unit: 2152

Applicant argues in substance that: (A) Salett fails to disclose inserting a vector in a packet; (B) Kalkunte fails to disclose inserting a vector in a packet that identifies a first device in a stack of forwarding devices that delivers the packet to an exception processor being shared by the forwarding devices in the stack; (C) Abali fails to disclose inserting a vector in a packet that identifies a first device in a stack of packet forwarding devices that delivers the packet to an exception processor being shared by the forwarding devices in the stack.

In this case, (A) Salett discloses inserting a vector in a packet:

Salett teaches using the lower 56 bits of the 64-bit CAM cycle word to indicate source or routing information for a data frame. In particular, bits 0-47 are used to indicate ports, while the next eight bits are used to indicate the presence of up to eight switches. Thus, obviously, in order to identify a particular port/switch (i.e., a first device), a bit (i.e., a vector) corresponding to that particular port/switch has to be set (i.e., inserting).

(B) Kalkunte was not relied upon for inserting a vector in a packet identifies a first device in a stack of forwarding devices. Rather, Kalkunte was relied upon to show an exception processor being shared by the forwarding devices in the stack (i.e., the server is being shared by clients; Figure 41).

(C) Abali was not relied upon for inserting a vector in a packet identifies a first device in a stack of forwarding devices. Rather, Abali was relied upon to show removing the vector from the packet for delivering the packet to the exception processor (e.g., in source-based routing scheme, switches do not make any intelligent routing decisions. The switch strips off the first word before forwarding the packet to the next level in the network. Thus the packet contains no routing information upon arriving at its ultimate destination; col. 1: lines 46-65).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 8-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claim 8 recites the limitation “on a computer-readable medium” which is not supported in the disclosure.

Claims 9-14 depend on claim 8, thus are rejected under the same basis.

Double Patenting

8. Claims 1, 3-5, 7-8, 10-12, 14-15, 17-18, 20-21, 23-24 and 26 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4-5, 7-9, 11-12, 14-15, 16, 18-19, 21-22, and 24-25, of copending Application No. 10/749,792, respectively, in view of Sallet et al (US 6,490,276). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims recite substantially same limitations, except delivering the packet to an exception processor being shared by the packet forwarding device in the stack. Sallet discloses a method for forwarding a data frame from a first switch to a second switch, thus it would have been obvious to one of

Art Unit: 2152

ordinary skill in the art at the time the invention was made to apply Sallet's method of forwarding data frames to the instance application in order to transmit data effectively.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 1-4, 7-11, 14-17 and 18-26 are rejected under 35 U.S.C. 103(a) as being anticipated by Salett et al (US 6,490,276), hereinafter Salett, in view of Kalkunte et al (US 7,139,269).

Regarding claims 1, 8, 15, 18, 21 and 24, Salett discloses a method comprising:

inserting a vector in a packet that identifies a first device in a stack of packet forwarding devices that delivers the packet to an exception processor (e.g., a 64-bit header is used to indicate the source and destination information for each set of data frames transmitted on the network. The encoding is preferably in a vector form of 1 bit per port; col. 3: lines 44-63 and col. 4: lines 15-21).

However, Salett does not explicitly call for the exception processor being shared by the packet forwarding devices in the stack.

As shown in Figure 41, Kalkunte teaches the server (port 8) is being shared by clients (ports 1-6).

Art Unit: 2152

Kaklunte's shared exception processor is a well-known configuration in the art, e.g., a router routes traffic for many sources or a server can be shared among/connected to many clients. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made that Kaklunte's shared exception processor is a viable option in Salett's system.

Regarding claims 2, 9, 16, 19, 22 and 25, Salett-Kalkunte also discloses inserting a flag in the packet that indicates the packet is associated with an exception (e.g., the header provides six bits for the destination; Salett, col. 4: lines 18-21).

Regarding claims 3, 10, 17, 20, 23 and 26, Salett-Kalkunte also discloses using the vector and a table to determine a port for sending the packet to the first device in the stack of packet forwarding devices (using 64-bit word and CAM 213, 221 to transfer data frames between a port to a switch or between switches, e.g., when station A215 first transmits a data frame, it is received by switch 205 on port 4. The CAM 213 in switch 205 updates a station list contained in the CAM 213 to indicate that station A215 is on port 4; Salett, col. 4: lines 39-50).

Regarding claims 4 and 11, Salett-Kalkunte also discloses the vector includes a bit identifying the first device in the stack of packet forwarding devices (e.g., the lower 56 bits of the 64-bit CAM cycle word is used to indicate source or routing information for a data frame, with bits 48-55 are used to indicate the network switches; Salett, col. 3: lines 44-63).

Regarding claims 7 and 14, Salett-Kalkunte also discloses the vector includes bits respectively identifying the packet forwarding devices in the stack (e.g., the lower 56 bits of the

Art Unit: 2152

64-bit CAM cycle word is used to indicate source or routing information for a data frame, with bits 48-55 are used to indicate the network switches; Salett, col. 3: lines 44-63).

11. Claims 5-6 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salett-Kalkunte as respectively applied to claims 1 and 8 above, in view of Abali et al (US 5,721,820), hereinafter Abali.

Salett-Kalkunte discloses substantially all claimed limitations, except removing the vector from the packet for delivering the packet to the exception processor.

Abali teaches removing the vector from the packet for delivering the packet to the exception processor (e.g., in source-based routing scheme, switches do not make any intelligent routing decisions. The switch strips off the first word before forwarding the packet to the next level in the network. Thus the packet contains no routing information upon arriving its ultimate destination; col. 1: lines 46-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Abali's method of routing data in Salett-Kalkunte's system in order to provide data routing in a topology independent fashion that satisfies cost, performance and resource constraints.

Regarding claims 6 and 13, Salett-Kalkunte-Abali also discloses the packet is delivered over a transmission line in an aggregate of transmission lines to the exception processor shared by the packet forwarding devices in the stack (Abali; Figure 1, communications in the network is facilitated by links connecting the processors or switches; col. 3: lines 3-25).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN KIM T. NGUYEN whose telephone number is (571)272-3073. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Van Kim T. Nguyen
Examiner
Art Unit 2152

Vkn

/Bunjob Jaroenchonwanit/
Supervisory Patent Examiner, Art Unit 2152